

postprandiale, l'hémoglobine glyquée (HbA1c), cholestérol total, triglycéride, HDL-CT et LDL-CT.

**Résultat.**– La moyenne d'âge des 34 patients inclus était de  $56,2 \pm 9,2$  ans et 58,8 % des patients étaient de sexe féminin. Tous les patients inclus étaient diabétiques et hypertendus sous traitement. L'IMC moyen était de  $30,2 \pm 4,8$  et le tour de taille moyen de  $107,8 \pm 9,3$  cm. Le score USP total était de  $8,3 \pm 6$ . 29 patients avaient un syndrome clinique d'hyperactivité vésicale et 13 patients avaient une incontinence urinaire d'effort. Le sous-score USP hyperactivité vésicale était positivement corrélé à l'âge, la valeur de tour de taille, à l'IMC et à la glycémie postprandiale. Les autres paramètres du SM n'étaient pas corrélés aux symptômes urinaires. Le score USP total et sous-score hyperactivité vésicale USP étaient plus altérés chez les patients avec atteinte du système nerveux autonome mais sans différence significative.

**Discussion.**– Les symptômes urinaires les plus fréquemment rencontrés au cours du SM étaient l'hyperactivité vésicale et l'incontinence urinaire à l'effort. Les paramètres du SM qui influençaient le score USP étaient l'obésité abdominale et l'hyperglycémie. L'hypothèse d'un lien entre SM et hyperactivité vésicale chez les patients diabétiques avec un SM est donc plausible.

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## English version

P045-e

### One Ditropan<sup>®</sup> is fine, but six. Beware of the havoc!

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**Keywords:** Addiction; Oxybutynine; Neurogenic bladder

For spinal cord injury patients with chronic bladder retention/paraplegia and high pressure/acontractile detrusor overactivity, a combination first line therapy is often proposed associating an anticholinergic agent (oxybutynin) with bladder self-catheterization.

We present the case of a 35-year-old patient with paraplegia since May 2007 due to a traumatic L1 crush fracture leading to posterior displacement of the posterior wall and the clinical features of equina cauda symptoms. The patient also had a history of addiction to multiple toxic substances (alcohol, cannabis, rivotril, artane...). The first urodynamic evaluation found an overactive bladder with dangerously high pressures ( $> 40$  cm H<sub>2</sub>O). Treatment with Ditropan<sup>®</sup> (oxybutynin) three pills per day was introduced, together with self-catheterization.

In 2011, it is noted that the patient solicited the medical team four times in order to renew his "lost" prescriptions. Contact with the pharmacist revealed a weekly supply of the pill initially prescribed for one month. The patient eventually admitted misusing the treatment. In his words "One pill doesn't do anything, you really feel the difference with 6! It's like Artane." He reported a floating sensation, an over surge in strength, with a decrease in spasticity and a few palpitations.

**Discussion.**– Since the 1970s, Artane<sup>®</sup> (trihexyphenidyl) has been the leading drug addiction in Reunion Island. The intended effect is euphoria, psychic stimulation with a sense of omnipotence and a stimulating effect close to amphetamines, crack and ecstasy. It is often absorbed with a caffeinated drink: coffee, soda, energy drinks like "Red Bull" in order to prolong the psychostimulant effect and limit the amnesia. There is an important black market for Artane<sup>®</sup> in Reunion Island where it is sold for 5–10 € the tablet. In France, misuse of Artane is a specificity of Reunion Island. Worldwide, it is hugely consumed in Brazil, the North African countries and the Middle East. To our knowledge misuse of Ditropan<sup>®</sup> (oxybutynin) has not yet been described so far in the medical literature.

**Further reading**

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P046-e

### Time of anticholinergics efficacy in overactive neurogenic bladder

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**Keywords:** Anticholinergics; Antimuscarics; Neurogenic bladder; Detrusor overactivity; Urodynamics

**Aims/Purpose.**– Appreciate the time of clinical and urodynamic anticholinergics efficacy (Oxybutynin, Trospium) used in detrusor neurogenic overactivity.

**Material and methods.**– Our study includes ten neurologic patients hospitalized in our center and followed prospectively in the first half of 2012. All of them are under intermittent self-catheterization (ISC) and all have incontinence urinary by neurogenic detrusor overactivity.

They have a clinical and urodynamic assessment before anticholinergic treatment. The clinical assessment (functional bladder capacity, voiding diary, leak frequency) as urodynamic (Maximal bladder capacity, compliance and detrusor contraction amplitude) are made between day 3 and day 7.

**Results.**–After 5 day of treatment, antimuscarinic drugs have a dual efficacy: – clinic: 60% of continent patients without any leak;

– urodynamic: maximal bladder capacity (MBC)  $> 400$  mL and detrusor contraction amplitude (DCA)  $< 20$  cm H<sub>2</sub>O in 50% of patients.

**Discussion/conclusion.**– Anticholinergics have a clinical and urodynamic efficacy in 30% of spinal cord injured patients and still remain the first line treatment of neurogenic overactive bladder. Their time of efficacy is not specified in the literature.

Our study reveals a short time of efficacy allowing the treatment adaptation on average of 5 days.

**Further reading**

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P047-e

### Neurological bladder complicating encephalitis of Gayet Wernicke: Case report

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**Keywords:** Encephalitis of Gayet Wernicke; Thiamine deficiency; Pregnancy vomiting; Bladder disorders

**Introduction.**– Neurological damage caused by thiamine's deficiency are most often related to chronic alcoholic intoxication. Vomiting in pregnancy are rarely post in question. The association with bladder disorders is exceptional.

**Observation.**–We report the case of a patient aged 39 years with no significant medical history. At 9 weeks pregnancy, she presented uncontrollable vomiting with anorexia and secondary, occurrence of tetraparesis with ataxia, headache, memory impairment, associated with urinary disorders (retention, dysuria). The diagnosis of encephalitis of Gayet Wernicke by vitamin B1 deficiency was made. The patient received supplementation with vitamin B1 associated with a high protein and high-calorie diet with a good evolution of the general plan. Intermittent catheterisation were necessary after removal of the catheter associated with an adequate sensorimotor rehabilitation.

**Discussion.**— The possibility of thiamine deficiency should not be raised only with chronic alcoholic patients, but also in a context of chronic undernutrition often hidden. The urinary disorders are not always at the forefront of neurological semiology and can have a central or peripheral appearance. They must be sought and managed in case of neurological impairment. Their functional prognosis is often favorable.

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P048-e

### **Mestinon 60 mg in the treatment of diabetic cystopathy: Our experience about 24 cases**

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**Keywords:** Mestinon; Diabetes underactive bladder

**Objective.**— Mestinon 60 mg is a parasympathomimetic, cholinesterase inhibitor, which contains the active pyridostigmine which extends and enhances the effects of muscarinic and nicotinic acetylcholine. It is usually used in the treatment of myasthenia and intestinal atony, its use as a treatment for hypo-active bladder of diabetic subject is recent and has shown excellent results.

The aim of this study is to provide the results of our experience.

**Materials and methods.**— Twenty-four diabetic patients with underactive bladder confirmed by urodynamic studies were treated with Mestinon 60 mg dose to one tablet twice per day, the evaluation was clinical, ultrasound and urodynamics.

**Results.**— The average patient age was 59 years, the median duration of diabetes before treatment was 11 years, diabetes type I was interested in 88% of patients. Treatment with 60 mg Mestinon restored a good clinical improvement with urination, ultrasound (absence of post-voiding residue) and urodynamics in 96% of cases.

No adverse effects were noted except for one case of diarrhea. During the median follow-up to 3 years, the results were stable.

**Discussion.**— Excellent results of Mestinon and lack of side effects, this treatment needs to be prescribed as first line diabetes underactive bladder.

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P049-e

### **Metabolic syndrome and urinary disorders**

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**Keywords:** Metabolic syndrome; Obesity; Diabetes; Overactive bladder

**Introduction.**— Lower urinary tract symptoms (LUTS) are under-evaluated in metabolic syndrome (MS). Many factors in this syndrome are implicated to develop LUTS. The goals of this study were to analyze the frequency of the LUTS in patients with MS and to examine the potential role of MS components in the development of LUTS.

**Methods.**— We used urinary symptom profile (USP) to evaluate LUTS. The physical examination included: weight, waist circumference, body mass index (BMI) and blood pressure looking for orthostatic hypotension. The following laboratory data were obtained: fasting blood sugar, postprandial glycemia, glycosylated hemoglobin (HbA1c), HDL cholesterol, LDL cholesterol, triglycerides and total cholesterol.

**Results.**— The average age of 34 enrolled patients was  $56.2 \pm 9.2$  years and 58.8% of patients were female. All patients had diabetic and hypertension therapy. The mean of BMI was  $30.2 \pm 4.8$  and waist circumference was  $107.8 \pm 9.3$  cm. USP total score was  $8.3 \pm 6$ . Twenty-nine patients had overactive bladder symptom, and 13 patients had urinary incontinence. The overactive bladder USP score was positively correlated with age, waist circumference, BMI and postprandial glycemia. The other components of MS did not correlate with urinary symptoms. Total USP score and sub-score USP were more altered in patients with involvement of the automatic nervous system, but not significantly.

**Discussion.**— The most frequency urinary symptom in the MS was overactive bladder and urinary incontinence. The components of MS that influenced the USP score were abdominal obesity and hyperglycemia. The hypothesis of link between MS and overactive bladder in diabetic patients with MS is plausible.

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